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## NOTICE OF ALLOWANCE AND FEE(S) DUE

30671

7590

11/10/2009

DITTHAVONG MORI & STEINER, P.C.  
918 Prince Street  
Alexandria, VA 22314

EXAMINER

HU, HENRY S

ART UNIT

PAPER NUMBER

1796

DATE MAILED: 11/10/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,189	12/09/2005	Akira Yoshida	01050-1008	1492

TITLE OF INVENTION: VULCANIZED FLUORINE RUBBER AND CUSHIONING MATERIAL FOR HEAT PRESS CONTAINING SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/10/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to:** **Mail** **Mail Stop ISSUE FEE**  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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30671 7590 11/10/2009  
**DITTHAVONG MORI & STEINER, P.C.**  
 918 Prince Street  
 Alexandria, VA 22314

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,189	12/09/2005	Akira Yoshida	01050-1008	1492

**TITLE OF INVENTION:** VULCANIZED FLUORINE RUBBER AND CUSHIONING MATERIAL FOR HEAT PRESS CONTAINING SAME

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nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/10/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
HU, HENRY S	1796	525-197000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2  
 3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

**PLEASE NOTE:** Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

**NOTE:** The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_  
 Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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30671	7590	11/10/2009	EXAMINER	
DITTHAVONG MORI & STEINER, P.C. 918 Prince Street Alexandria, VA 22314			HU, HENRY S	
			ART UNIT	PAPER NUMBER
			1796	
DATE MAILED: 11/10/2009				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 682 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 682 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability****Application No.**

10/560,189

**Examiner**

HENRY S. HU

**Applicant(s)**

YOSHIDA, AKIRA

**Art Unit**

1796

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment of August 13, 2009.
2. ☒ The allowed claim(s) is/are 6-10.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given with Attorney **Arthur J. Steiner** (registration # 26,106, tel: 703 519-9951) on **November 2, 2009** to cancel non-elected Claims 1-5 as following:

#### **Claim**

**Claims 1-5** please cancel Claims 1-5

### DETAILED ACTION

2. This Office Action is in response to **Amendment** filed on August 13, 2009, which is in response to non-final office action filed on May 13, 2009. With such an amendment along with above Examiner's Amendment, **Claim 6 is amended; non-elected Claims 1-5 are cancelled, while no new claim is added.** To be specific, the elected **Claim 6** is now "once-amended" in **two** ways including: (A) to incorporate all the limitations from parent Claim 1 so

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that it becomes independent claim, and (B) to replace “an appropriate amount” with “a predetermined amount” for more clarification so as to overcome claim objection.

As discussed earlier, this Application is a **371/PCT/JP04/06843** with a Japanese priority at June 9, 2003. Applicants’ **four IDS** (1 page each) have been filed so far. The examiner accepts Applicants’ **two** drawing sheets with **Figures 1-4** (a brief description is on page **2**). **Claims 6-10 with one independent claim (Claim 6) are now pending.** An action follows.

3. Claim rejections under **Non-Final** Office Action filed on May 13, 2009 are now removed for the reasons given in paragraphs 4-13 thereafter.

***Allowable Subject Matter***

4. Claims 6-10 are allowed.

5. The following is an examiner’s statement of reasons for allowance: The above Claims 6-10 are allowed over the closest references:

6. The limitation of “once-amended” parent **Claim 6** in present invention relates to **a hot-press cushion material** “comprising”:

***A vulcanized fluoro rubber** provided by vulcanizing a composition comprising three or four components including rubber (A), rubber (B), acid acceptor (b) and optional compounding agent (c) as following:*

*(a) 100 parts by mass of “**mixture**” in which **a raw fluoro rubber (A) in which an appropriate amount of vulcanizing agent has been previously compounded and a raw fluoro rubber (B) in which the vulcanizing agent is not compounded** are mixed at a rate of 8/2 to 3/7, wherein number average molecular weight of each of said raw fluororubber (A) and said raw fluororubber (B) is  $3.5 \times 10^4$  to  $2.0 \times 10^5$ .*

*(b) 1 to 10 parts by mass of **an acid acceptor** and*

*(c) 0 to 5 parts by mass of “**another” compounding agent**.”*

See other limitations of dependent **Claims 7-10**.

7. Applicant has now claimed in “once-amended” parent **Claim 6** an unexpected way of obtaining some specified “**hot-press cushion material**”. The cushion is made by using a vulcanized fluororubber, which is provided by vulcanizing a composition comprising a mixture of **three or four** components including **fluororubber (A), fluororubber (B), acid acceptor (b) and compounding agent (c) while the use of (c) is optional**. The critical point is that the starting **fluororubber (A) has been pre-compounded** with vulcanizing agent, while the starting **fluororubber (B) is not pre-compounded with “a predetermined amount” of vulcanizing agent**. Open language “**comprising**” is applied to the composition of Claim 6.

8. As discussed earlier, three primary references including **Tanaka, Kenichi and Yasuhisa** even in combination is “still” at least silent about two things including: (A) adding a starting **fluororubber (B) is not pre-compounded with any vulcanizing agent**, and (B) the **motivation** along with its **advantage** why to do so. However, **Sonol and Blenner** even in combination still fails to teach such two silent things at the same time for the 103 rejection as follows:

9. As exactly pointed out by Applicants on page 7 of Remarks, **Sonol** only discloses the preparation of a composition to be useful **for low hardness**. The composition comprises: a fluorine-containing rubber, **a liquid fluorinated rubber**, and aliphatic amine and a perfluoropolyether”. Based on the fact that according to the art, **liquid fluorinated rubber will bleed at high temperature under high pressure**, Sonoi indeed teaches away the hot-press cushion of parent Claim 6.

10. As also exactly pointed out by Applicants on page 8 of Remarks, **Blenner** merely teaches the use of one fluororubber alone. Therefore, Blender similarly fails to teach or suggest using a claimed mixture of raw fluoro robber with a predetermined amount of vulcanizing agent being previously compounded and a raw fnoro rubber in which vulcanizing agent is not compounded.



11. In summary, Sonol teaches away from the claimed invention, while Blenner fails to teach or even remotely suggest the aforementioned features. Therefore, this invention is novel and not obvious. Therefore, the references in combination or alone cannot disclose or suggest such a hot-press cushion material as discussed above.

12. After further examination and search, the examiner found the following prior art did not teach the claimed limitation:

**US 7,018,705 B2 to Nakatani et al.** only discloses the preparation of some multiplayer circuit boards by using some cured and uncured thermosetting resins with lamination. See column 2, line 42-60; column 10, line 33-41. The claimed vulcanized fluororubber composition as well as to be useful as hot-pressed cushion are not disclosed or suggested. Therefore, Nakatani fails to teach or fairly suggest hot-press cushion composition limitation of present application.

13. As of the date of this office action, the examiner has not located or identified any reference that can be used singularly or in combination with another reference including the above references to render the present invention anticipated or obvious to one of the ordinary skill in the art. Therefore, the independent composition **Claim 6** is allowed for the reason listed above. Since the prior art of record fails to teach the present invention, the remaining pending dependent **Claims 7-10** are passed to issue.

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14. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Dr. Henry S. Hu whose telephone number is (571) 272-1103**. The examiner can be reached on Monday through Friday from 9:00 AM –5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Vasu Jagannathan, can be reached on (571) 272-1119. The **fax** number for the organization where this application or proceeding is assigned is **(571) 273-8300** for all regular communications. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Peter D. Mulcahy/  
Primary Examiner, Art Unit 1796

/Henry S. Hu/  
Examiner, Art Unit 1796

November 2, 2009